

NUTRITION DURING PREGNANCY

[insert presenter info]



Why is nutrition so important?

- 🍒 Meet increased nutrient demands
- 🍒 Provide needed energy
- 🍒 Prevent or minimize common pregnancy-related problems
- 🍒 Reduce risk of birth defects
- 🍒 Supply needed nutrients for baby's growth
- 🍒 Ensure healthy birth weight
- 🍒 Maintain a healthy weight



Recommended Weight Gain

 Underweight	28-40 lbs
 Normal weight	25-35 lbs
 Overweight	15-25 lbs
 Obese	at least 15 lbs
 Twins	35-45 lbs



Normal Pregnancy Weight Gain

🍒 Breast	1-1.5 lbs
🍒 Blood	3-4.5 lbs
🍒 Extra water	4-6 lbs
🍒 Uterus	2.5-3.0 lbs
🍒 Placenta/amniotic fluid	3.5-5.5 lbs
🍒 Baby	7-8 lbs
🍒 Fat stores	4-6.5 lbs
Total	25-35 lbs



Eating for Two!!

🍒 ~300 calories/day during 2nd and 3rd trimester

🍒 300 calories:

🥕 1½ sandwich + 1 c. milk/yogurt OR

🥕 1 c. cereal + 1 c. milk + banana OR

🥕 Peanut butter on 2 slices toast + 1 c. milk



Proper nutrition

Major Nutrients

 Carbohydrates

 Protein

 Fat

 Vitamins

 Minerals

 Water



Carbohydrates

🍓 Sugars and starches

🍓 Body's primary source

🍓 Do carbs make you fat?

🍓 Fruits, breads, some vegetables, grains, milk (4 servings/day)

🍓 Should make up 60-70% of total daily calories



Fat

- 🍒 Source of stored energy activity
- 🍒 Makes you feel full and no hungry
- 🍒 Helps the body absorb fat nutrients
- 🍒 Choose healthy fats
- 🍒 20-25% of total calories (use sparingly)
- 🍒 Contains most calories per gram



Protein

- 🍷 Builds and repairs the body
- 🍷 Used for energy if the diet is inadequate in carbohydrates
- 🍷 Found in fish, poultry, meats, tofu, nuts, beans, eggs, milk, cheese
- 🍷 Need ~10 grams more per day in pregnancy
- 🍷 10-20% of total calories



Water

- 🍒 60-75% of body weight
- 🍒 Stabilizes body temperature
- 🍒 Carries nutrients to and waste away from cells
- 🍒 Needed for cell function
- 🍒 8-12 cups/day



Fiber



🍒 **Fiber: Whole grains, fruits, vegetables**

🥕 **Wheat bread: check the label**

🥕 **Fruit vs. Juice**

🍒 **Stabilizes blood sugar**

🍒 **Protection from diabetes, constipation, diverticulosis, lowers LDL cholesterol**

🍒 **25-35 grams/day**



Vitamins and Minerals

 **Body does not make most vitamins**

 **Good source: Deep colored fruits and vegetables**

 **Fresh, frozen, canned**

 **Multivitamin: phytonutrients and antioxidants**

 **B Vitamins**



Special Interest Nutrients




Vitamin B₁₂

- 🍒 **Generally adequate amounts are obtained through animal products**
 - 🥕 **Fish, eggs, milk, meats, etc.**
- 🍒 **Vegans that do not have any animal products in their diet need supplementation**
- 🍒 **Works with folic acid in cell growth and is essential to the normal development of the infant**







Folic Acid

 A supplement taken 1-3 months prior to conception and during first 6 weeks gestation reduces the risk of neural tube defects

 Needed for rapidly dividing cells, protein metabolism, and formation of red blood cells



Food Sources of Folic Acid

-  **Fortified breakfast cereals**
-  **Dried beans**
-  **Liver/meats**
-  **Spinach and green leafy vegetables**
-  **Citrus fruits**
-  **Peanuts and sunflower seeds**



Iron

- 🍒 Needed for the formation of red blood cells
- 🍒 15 milligrams a day for woman during childbearing years recommended
- 🍒 Typical American diet 10-11 milligrams a day



Food Sources of Iron

 **Meats**

 **Fish**

 **Poultry**

 **Legumes**

 **Whole-grain
and enriched
breads**

 **Enriched
cereals**

 **Dark greens**

 **Dried apricots**



Calcium

- 🍒 **Calcium absorption doubles early in pregnancy**
- 🍒 **Is used in the formation of fetal bones**
- 🍒 **Will be absorbed from maternal bones if not enough calcium in diet**
- 🍒 **Calcium absorption increases with Vitamin D**






Food Sources of Calcium

- 🍒 Milk low-fat, skim
- 🍒 Yogurt (low-fat)
- 🍒 Oysters
- 🍒 Shrimp
- 🍒 Calcium-fortified apple and orange juice
- 🍒 Collard greens
- 🍒 Broccoli
- 🍒 Turnip greens
- 🍒 Sesame seeds



Foods to Avoid

-  **Fish containing high levels of mercury (shark, swordfish, king mackerel, and tile-fish)**
-  **Raw fish and raw shellfish**
-  **Raw eggs or dishes containing raw or partially cooked eggs**



Foods to Avoid (cont.)

 **Raw or undercooked meat and poultry**

 **Sushi**

 **Pate**

 **Soft or blue-veined cheeses**

 **Unpasteurized cheeses**

 **Deli meats**



Things to Avoid During Pregnancy

 Alcohol

 Cigarettes

 Recreational drugs

 Over-The-Counter Medications or Herbal Supplements

 Consult health care provider

 Caffeine

 Consult health care provider



The Food Guide Pyramid

Fats, Oils & Sweets
USE SPARINGLY

KEY

- Fat (naturally occurring and added)
- ▼ Sugars (added)

These symbols show fats and added sugars in foods.

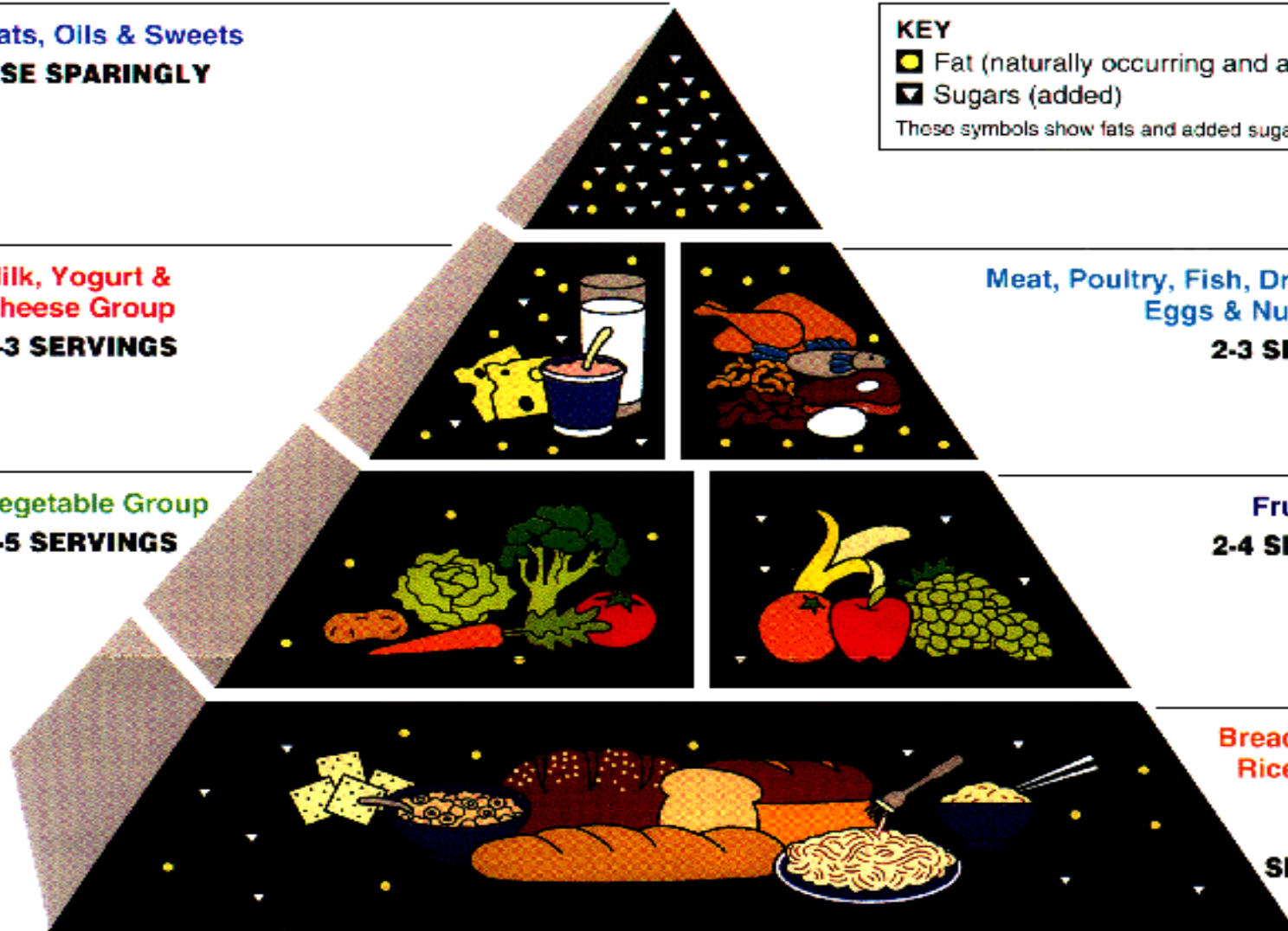
**Milk, Yogurt &
Cheese Group**
2-3 SERVINGS

**Meat, Poultry, Fish, Dry Beans,
Eggs & Nuts Group**
2-3 SERVINGS

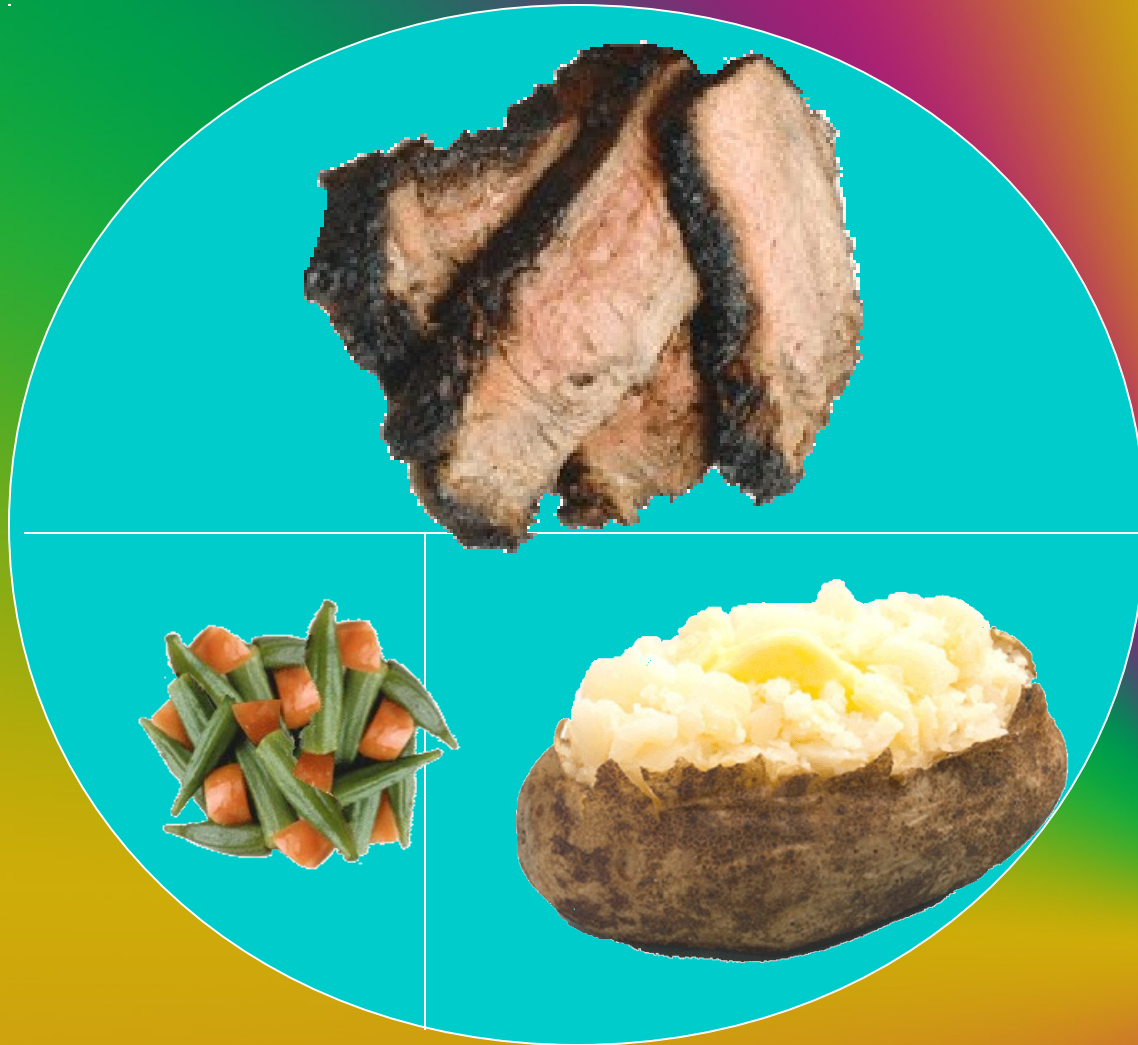
Vegetable Group
3-5 SERVINGS

Fruit Group
2-4 SERVINGS

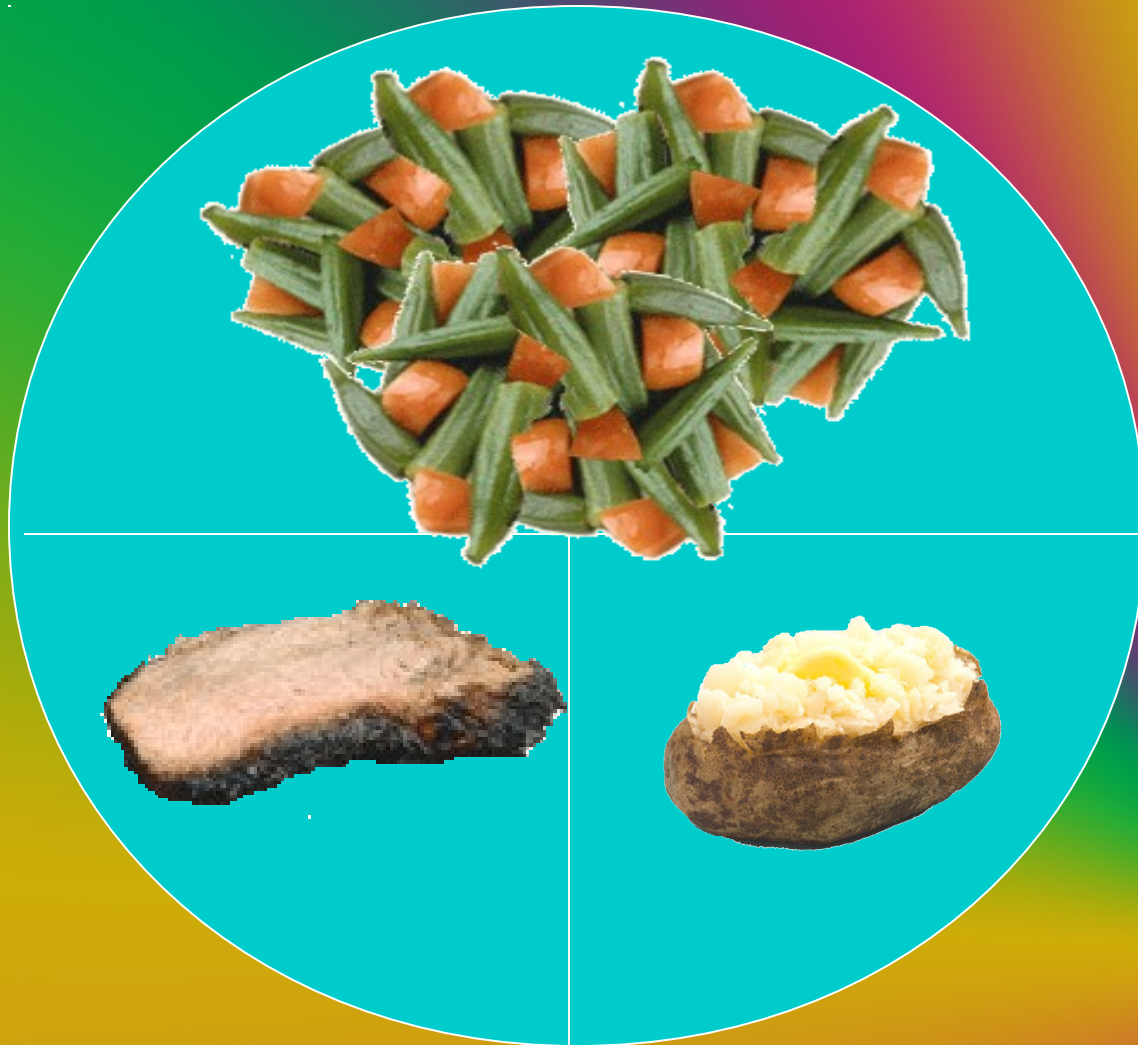
**Bread, Cereal,
Rice & Pasta
Group**
**6-11
SERVINGS**



Typical Plate



Reconstruct Your Plate



Common Pregnancy Problems



Nausea and Vomiting

- 🍒 Avoid strong odors
- 🍒 Eat before getting out of bed - crackers, plain toast, or dry cereal
- 🍒 Avoid an empty stomach
- 🍒 Eat easy-to-digest foods
- 🍒 Eat slowly
- 🍒 Snack before bed
- 🍒 Try lemon, ginger tea, lemonade, ginger ale, Sprite, 7-up etc. to settle stomach



Constipation

- 🍒 **Hormonal changes slow down the intestine**
- 🍒 **Drink 8-12 glasses of water everyday**
- 🍒 **Eat high-fiber foods**
- 🍒 **Try dried plums, prune juice, or figs**
- 🍒 **Be as physically active as possible**
- 🍒 **Do not use laxatives unless prescribed by health care provider**



Heartburn

- 🍒 Eat small meals frequently
- 🍒 Cut down on caffeinated and carbonated beverages
- 🍒 Eat slowly in a relaxed environment
- 🍒 Do not lie down after eating
- 🍒 Prop head of bed up
- 🍒 Wear loose-fitting comfortable clothes
- 🍒 Avoid gaining too much weight
- 🍒 Talk to doctor before taking antacids



Swelling

- 🍒 As blood supply increases, legs, feet, and arms may swell
- 🍒 Drink plenty of fluids, especially water
- 🍒 Avoid diuretics, unless prescribed by health care provider
- 🍒 Elevate your feet whenever possible
- 🍒 Wear loose-fitting shoes and clothes



Pica (nonfood cravings)

- 🍒 Some pregnant women develop cravings for nonfood substances like clay, dirt, ice, or laundry starch
- 🍒 This does not reflect a physiological need for a particular nutrient
- 🍒 Pica is especially common in African American women
- 🍒 Pica may lead to iron-deficiency anemia, malnutrition and lead exposure (brain damage)



Questions??





Acknowledgements

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U.S. Army Center for Health Promotion and Preventive Medicine

Krause's Food, Nutrition, and Diet Therapy

Nutrition for Women: The Complete Guide Elizabeth Somer, MA, RD

**What to Expect When You Are Expecting Eisenberg, Murkoff, and
Hathaway**

